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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/671,841	09/25/2003	Dave Marquardt	004.0124	9644

29906 7590 01/13/2005

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EXAMINER

RACHUBA, MAURINA T

ART UNIT	PAPER NUMBER
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3723

DATE MAILED: 01/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Applicant(s)

10/671,841

Applicant(s)

MARQUARDT ET AL.

Examiner

M Rachuba

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1,2,6-8,11,12,16-18,21,22 and 26-28 is/are rejected.
- 7) ☒ Claim(s) 3-5,9,10,13-15,19,20,23-25,29 and 30 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 9/25/03.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: ____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. Claims 1, 2, 6-8, 11, 12, 16-18, 21, 22 and 26-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over James et al, US006488570B1 in view of Nabeya, US 20020187735A1. '570, figure 1, discloses the claimed device except for the pad platen having at least one inlet for introducing fluid to the top surface; a manifold system, entrenched in the top surface and in communication with the inlet, and the pad having a plurality of fluid delivery through-holes for introducing the fluid from the manifold system to the top pad surface. In other words, the pad of '570 receives fluid from a conventional drip system above the pad surface, and not through the pad via through-

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holes. '735, figures 1 and 2, clearly teaches providing fluid from a manifold through a platen and through through-holes in the polishing pad, the through-holes placed in the lands formed by intersecting grooves, for providing fluid to the upper surface of the pad during use. It would have been obvious to one of ordinary skill to have provided '570 with the fluid supply system of '735, [0004] and [0028], to prevent vibration of the substrate carrier and to conserve polishing fluid.

Further, regarding claims 6, 7, 16, 17, 26 and 27, which limit the sizes of the first and second grooves, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have made the first and second grooves of any size desired, keeping the second grooves smaller than the first grooves, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233. Here, '570 clearly discloses that the second grooves 18 are of a smaller depth and width than the first grooves 20.

Allowable Subject Matter

4. Claims 3-5, 9, 10, 13-15, 19, 20, 23-25, 29 and 30 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

5. The following is a statement of reasons for the indication of allowable subject matter: the prior art of record does not disclose or fairly teach that the second grooves on the lands intersect at right angles and communicate with the first grooves at right

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angles. '570 does not disclose or fairly teach any other pattern than straight flow channels for the grooves. While '735 does teach the first grooves intersecting at right angles, it does not teach second grooves on the lands.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Other similar polishing pads are cited of interest.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to M Rachuba whose telephone number is **(571) 272-4493**. The examiner can normally be reached on Monday-Thursday from 8:30 AM to 3:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Hail, can be reached on (571) 272-4485. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

M. Rachuba
Primary Patent Examiner

Handwritten signature of M. Rachuba and the date 1/10/05.